

## ABSTRACT

[0042] A method of digitally canceling interference on a received signal 60 within a satellite payload 44 using an interference reference feedforward signal 62 is provided. The satellite payload 44 of the present invention receives a communication signal 54 with interference via a first antenna 52. The communication signal 54 is converted into a received signal 60 and transferred to into a first input 61a of a satellite payload circuit 61. The satellite payload circuit 61 has the first input 61a, a second input 61b, and an output 61c. The output 61c is electrically coupled to the second input 61b by a feedforward signal path 70. The satellite payload circuit 61 adaptively cancels interference on the received signal 60 using an interference reference feedforward signal 62 that is transferred from the output 61c to the second input 61b via the feedforward signal path 70.